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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			ART UNIT 2121	PAPER NUMBER

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,201	Applicant(s) BERGMAN ET AL.	
	Examiner Crystal J. Barnes	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9,12-32,34-49 and 82-106 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-9,12-32,34-49 and 82-106 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>28 September 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Final Office Action in response to the Amendment received on 23 November 2005. Claims 10, 11, 33 and 50-81 have been cancelled. Claims 1, 5, 9, 17, 18, 21, 22, 24, 26-28 and 34-49 have been amended. Claims 82-106 have been added. Claims 1-9, 12-32, 34-49 and 82-106 are now pending in this application.

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 1-49 in the reply filed on 23 November 2005 is acknowledged.

Information Disclosure Statement

3. The examiner has considered the information disclosure statements (IDS) submitted on 28 September 2005.

Specification

4. The amendment to the specification was received on 23 November 2005. This correction is acceptable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, 12-16, 82, 83, 87 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2005/0116055 A1 to Alles in view of USPN 6,851,621 B1 to Wacker et al.

As per claim 1, the Alles reference discloses a method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a touch screen user interface that displays a number of different screens, the schedule having at least one schedule parameter, comprising the steps of: selecting two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week") using a first region of a first screen of the touch screen user interface; individually changing the at least one schedule parameter (see page 16 [0172], "editing a temperature schedule") for one or more periods (see page 15 [0162], "periods")

during the selected days ("select the days") ") using a second region of the first screen of the touch screen user interface; and saving the changes (see page 16 [0172], "SAVE selection 2040") to the at least one schedule parameter ("editing a temperature schedule") for the selected days ("select the days").

The Alles reference does not expressly disclose using first and second regions of a first screen of the touch screen user interface.

The Wacker et al. reference discloses
(see column 19 lines 49-52, "To insert changes, the user may click on "Modify", which may bring up the screen shown in FIG. 9h, where the user may enter the times of occupancy for the various days of the week.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the display screens taught by the Alles reference with the modify schedule screen taught by the Wacker et al. reference.

One of ordinary skill in the art would have been motivated to modify the display screens with the modify schedule screen to simplify the process of modifying the schedule with just one screen.

As per claim 2, the Alles reference discloses the step of selecting two or more days ("select the days") of the week ("entire week") to modify the schedule

("edit-mode") occurs prior to (see page 16 [0167], "7-Day display 2020") the step of changing the at least one schedule parameter ("editing a temperature schedule") for one or more periods ("periods") during the selected days ("select the days").

As per claim 3, the Alles reference discloses the step of selecting two or more days ("select the days") of the week ("entire week") to modify the schedule ("edit-mode") occurs after (see page 16 [0167], "7-Day display 2020") the step of changing the at least one schedule parameter ("editing a temperature schedule") for one or more periods ("periods") during the selected days ("select the days").

As per claim 4, the Alles reference discloses further comprising the step of initiating a schedule review mode (see page 16 [0167], "select-mode") within the controller (see page 15 [0162], "PDA interface") and displaying the current schedule parameters (see page 16 [0167], "all days that use the displayed temperature schedule are displayed as selected").

As per claim 5, the Alles reference discloses further comprising the steps of initializing a scheduling routine (see page 16 [0167], "edit-mode") within the controller (see page 15 [0162], "PDA interface") for modifying and/or displaying at least one schedule parameter within the schedule (see page 16 [0167], "editing a temperature schedule"); and initiating an editing mode ("edit-mode") within the

controller ("PDA interface") after initializing the scheduling routine ("select-mode"), but before performing the selecting, changing and saving steps ("edit mode, save selection").

As per claim 6, the Alles reference discloses said one or more periods ("periods") include a wake period (see page 15 [0162], "temperature schedule 2001 active 2005"), a leave period ("temperature schedule 2001 empty 2005"), a return period ("temperature schedule 2001 relaxing 2005"), and a sleep period ("temperature schedule 2001 sleeping 2005").

As per claim 7, the Alles reference discloses further comprising the step of canceling (see page 15 [0163], "Del selection 2007") one or more periods ("periods") in the schedule ("temperature schedule display").

As per claim 8, the Alles reference discloses said at least one schedule parameter ("editing a temperature schedule") is selected from the group consisting of an event time parameter (see page 15 [0164], "Enter time 2010"), a heat set point parameter (see page 17 [0181], "Heat 2116"), a cool set point parameter (see page 17 [0180], "Cool 2113"), a fan mode parameter (see page 18 [0182], "Air Circulation display 2117"), and a humidity level parameter.

As per claim 9, the Alles reference discloses further comprising the step of providing a visual indication (see page 16 [0173], "select-mode") on a second screen (see Wacker et al. figure 9g "weekly schedule screen") of the touch screen user interface ("PDA interface") that indicates that the one or more modified schedule parameters ("7-day temperature schedule, events schedule") have been saved ("save selection 2040").

As per claim 12, the Alles reference discloses the user interface (see page 15 [0161], "PDA display screen") is a menu-driven interface ("PDA home menu").

As per claim 13, the Alles reference discloses said schedule ("temperature schedule") is a heating schedule (see page 17 [0181], "Heat 2116").

As per claim 14, the Alles reference discloses said schedule ("temperature schedule") is a cooling schedule (see page 17 [0180], "Cool 2113").

As per claim 15, the Alles reference discloses said schedule ("temperature schedule") is a venting schedule (see page 18 [0183], "Quiet as Possible display 2118").

As per claim 16, the Alles reference discloses said schedule ("temperature schedule") is a fan schedule (see page 18 [0182], "Air Circulation display 2117").

As per claim 82, the Alles reference discloses the step of selecting two or more days ("select the days") of the week ("entire week") to modify the schedule ("edit-mode") occurs in part before and in part after (see page 16 [0167], "7-Day display 2020") the step of changing the at least one schedule parameter ("editing a temperature schedule") for one or more periods ("periods") during the selected days ("select the days").

As per claim 83, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are non-consecutive days ("select the days") of the week ("entire week").

As per claim 87, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are individually selected using the touch screen user interface ("PDA interface").

As per claim 98, the Alles reference discloses the visual indication ("7-Day display 2020, Group-display 2030") on the second user interface ("PDA interface") also provides an indication ("7-Day display 2020") of the selected days (see page 10 [0167], "days of the week") for which the at least one modified schedule parameters ("7-day temperature schedule") have been saved ("save selection 2040").

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2005/0116055 A1 to Alles in view of USPN 6,851,621 B1 to Wacker et al., and further in view of USPN 6,595,430 B1 to Shah.

As per claim 17, the Alles reference discloses said controller (see page 15 [0160], "PDA 80") is an HVAC thermostat (see page 5 [0065], "wireless thermometer 70") that is adapted to be mounted to a wall, the HVAC thermostat device including a temperature sensor and a menu-driven ("PDA home menu") user interface ("PDA interface").

Neither the Alles nor Wacker et al. references expressly disclose the HVAC thermostat device including a temperature sensor and a menu-driven ("PDA home menu") user interface.

The Shah reference discloses
(see column 3 lines 23-30, "The display unit 200 may be very similar to the touch screen display used in a hand-held personal digital assistant ("PDA"), such as a Palm brand PDA manufactured by 3 Com, a Jornada brand PDA manufactured by Hewlett Packard, etc. Of course the graphical user interface system could also be manufactured to be integrated with a thermostat itself. In such an embodiment, a

touch-sensitive LCD display is coupled with the thermostat's existing central processing unit and RAM.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the PDA interface taught by both the Alles and Wacker et al. references with the integrated graphical user interface thermostat system taught by the Shah reference.

One of ordinary skill in the art would have been motivated to modify the PDA interface with the integrated graphical user interface thermostat system to couple a touch-sensitive LCD display with the thermostat's existing central processing unit and RAM.

8. Claims 18-32, 34-36, 41-49 and 84-86, 88-97 and 99-106 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2005/0116055 A1 to Alles in view of USPN 6,595,430 B1 to Shah.

As per claim 18, the Alles reference discloses a method of programming a multiple-day schedule on a HVAC thermostat device that is adapted to be mounted to a wall, the HVAC thermostat device including a temperature sensor and a menu-driven user interface, the schedule having at least one schedule parameter,

comprising the steps of: initiating an editing mode (see page 16 [0167], "edit-mode") using the menu-driven user interface ("PDA interface") of the HVAC thermostat (see page 5 [0065], "wireless thermometer 70"); selecting two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week") using the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70") to modify the schedule (see page 16 [0167], "edit-mode"); changing the at least one schedule parameter (see page 16 [0172], "editing a temperature schedule") for one or more periods (see page 15 [0162], "periods") during the selected days ("select the days"); and exiting the editing mode (see page 16 [0172], "SAVE selection 2040") using the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70").

The Alles does not expressly disclose using the menu-driven user interface of the HVAC thermostat.

The Shah reference discloses

(see column 3 lines 23-30, "The display unit 200 may be very similar to the touch screen display used in a hand-held personal digital assistant ("PDA"), such as a Palm brand PDA manufactured by 3 Com, a Jornada brand PDA manufactured by

Hewlett Packard, etc. Of course the graphical user interface system could also be manufactured to be integrated with a thermostat itself. In such an embodiment, a touch-sensitive LCD display is coupled with the thermostat's existing central processing unit and RAM.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the PDA interface taught by the Alles reference with the integrated graphical user interface thermostat system taught by the Shah reference.

One of ordinary skill in the art would have been motivated to modify the PDA interface with the integrated graphical user interface thermostat system to couple a touch-sensitive LCD display with the thermostat's existing central processing unit and RAM.

As per claim 19, the Alles reference discloses the step of selecting two or more days ("select the days") of the week ("entire week") to modify the schedule ("edit-mode") occurs prior to (see page 16 [0167], "7-Day display 2020") the step of changing the at least one schedule parameter ("editing a temperature schedule") for one or more periods ("periods") during the selected days ("select the days").

As per claim 20, the Alles reference discloses the step of selecting two or more days ("select the days") of the week ("entire week") to modify the schedule ("edit-mode") occurs after (see page 16 [0167], "7-Day display 2020") the step of changing the at least one schedule parameter ("editing a temperature schedule") for one or more periods ("periods") during the selected days ("select the days").

As per claim 21, the Alles reference discloses further comprising the step of initiating a schedule review mode (see page 16 [0167], "select-mode") using the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70") and displaying the current schedule parameters (see page 16 [0167], "all days that use the displayed temperature schedule are displayed as selected").

As per claim 22, the Alles reference discloses the step of initiating a schedule review mode (see page 16 [0167], "select-mode") within the controller (see page 15 [0162], "PDA interface") and displaying the current schedule parameters (see page 16 [0167], "all days that use the displayed temperature schedule are displayed as selected") occurs prior to (see page 16 [0167], "7-Day display 2020") the step of initiating an editing mode ("edit-mode").

As per claim 23, the Alles reference discloses said one or more periods ("periods") include a wake period (see page 15 [0162], "temperature schedule 2001 active 2005"), a leave period ("temperature schedule 2001 empty 2005"), a return period ("temperature schedule 2001 relaxing 2005"), and a sleep period ("temperature schedule 2001 sleeping 2005").

As per claim 24, the Alles reference discloses further comprising the step of canceling (see page 15 [0163], "Del selection 2007") one or more periods ("periods") in the schedule ("temperature schedule display") using the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70").

As per claim 25, the Alles reference discloses said at least one schedule parameter ("editing a temperature schedule") is selected from the group consisting of an event time parameter (see page 15 [0164], "Enter time 2010"), a heat set point parameter (see page 17 [0181], "Heat 2116"), a cool set point parameter (see page 17 [0180], "Cool 2113"), a fan mode parameter (see page 18 [0182], "Air Circulation display 2117"), and a humidity level parameter.

As per claim 26, the Alles reference discloses said step of exiting the editing mode ("SAVE selection 2040") comprises the step of sending a signal to

save the changed schedule parameters (see page 16 [0172], "saves the displayed temperature scheduled"); and providing a visual indication ("Group-display 2030") on the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70") that indicates that the at least one modified schedule parameters ("7-day temperature schedule") have been saved ("save selection 2040").

As per claim 27, the Alles reference discloses the menu-driven user interface (see page 15 [0161], "PDA display screen") comprises a touch screen ("touch-sensitive").

As per claim 28, the Alles reference discloses the menu-driven user interface (see page 15 [0161], "PDA display screen") comprises a display panel ("display screen") and a separate keypad (see Shah column 4 lines 26-29, "physical buttons").

As per claim 29, the Alles reference discloses said schedule ("temperature schedule") is a heating schedule (see page 17 [0181], "Heat 2116").

As per claim 30, the Alles reference discloses said schedule ("temperature schedule") is a cooling schedule (see page 17 [0180], "Cool 2113").

As per claim 31, the Alles reference discloses said schedule ("temperature schedule") is a venting schedule (see page 18 [0183], "Quiet as Possible display 2118").

As per claim 32, the Alles reference discloses said schedule ("temperature schedule") is a fan schedule (see page 18 [0182], "Air Circulation display 2117").\

As per claim 84, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are non-consecutive days ("select the days") of the week ("entire week").

As per claim 88, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are individually selected using the menu-driven user interface ("PDA interface").

As per claim 99, the Alles reference discloses the visual indication ("7-Day display 2020, Group-display 2030") on the menu-driven user interface ("PDA interface") also provides an indication ("7-Day display 2020") of the selected days (see page 10 [0167], "days of the week") for which the at least one modified schedule parameters ("7-day temperature schedule") have been saved ("save selection 2040").

As per claim 100, the Alles reference discloses after initiating the editing mode ("edit mode"), providing a visual indication ("7-Day display 2020") on the user interface ("PDA interface") that indicates to the user that more than one day of the week may be selected (see page 16 [0166], "select the days" and [0167], "entire week").

As per claim 101, the Alles reference discloses further comprising the step of initiating a schedule review mode ("select mode") using the menu-driven user interface ("PDA interface") of the HVAC thermostat ("wireless thermometer 70") and displaying the current schedule parameters ("temperature schedule"), wherein in the schedule review mode ("select mode"), the visual indication that indicates to the user that more than one day of the week may be selected is not provided ("edit mode").

As per claim 34, the Alles reference discloses a programmable controller for use in controlling at least one system of a home, building and/or related grounds, the programmable controller comprising: an environmental sensor (see page 5 [0065], "wireless thermometer 70") for measuring an environmental condition in or around the vicinity of the programmable controller (see page 15 [0160], "PDA 80");

a user interface (see page 15 [0162], "PDA interface") that includes a display; a memory unit (see page 12 [0136], "flash memory 1504") for storing a set of schedule parameters ("house-specific data, temperature schedules, records of the temperatures and HVAC activity"), at least one of the scheduled parameters relating to the environment condition (see page 5 [0065], "temperature") measured by the environment sensor ("wireless thermometer 70"); and a processor electrically coupled to the user interface, the memory unit and the environmental sensor, and configured to run a scheduling routine ("program"), said scheduling routine ("program") including an editing mode (see page 16 [0167], "edit-mode") for programming a schedule ("temperature schedules") in the memory unit ("flash memory 1504") using the user interface ("PDA interface"); wherein the editing mode ("edit-mode") allows the user to use the user interface ("PDA interface") of the programmable controller ("PDA 80") concurrently select two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week") to modify the schedule ("temperature schedules"), and to edit ("edit-mode") the schedule parameters (see page 15 [0162], "specific time 2004, comfort climate 2005, temperature range 2008") for the selected days ("select the days").

The Alles reference does not expressly disclose a processor electrically coupled to the user interface, the memory unit and the environmental sensor.

The Shah reference discloses

(see column 3 lines 9-14, "The user interface system includes a central processing unit 100. This central processing unit 100 is coupled to a display unit 200 and a memory 300. The display unit 200 has a touch-sensitive screen which allows the user to input data without the need for a keyboard or mouse.")

(see column 3 lines 26-30, "Of course the graphical user interface system could also be manufactured to be integrated with a thermostat itself. In such an embodiment, a touch-sensitive LCD display is coupled with the thermostat's existing central processing unit and RAM.")

(see column 3 lines 64-67, "The user interface system also has conduits 800 to the heating/cooling devices or thermostats thereof so that user interface system can communicate with the thermostat or other comfort controller.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the PDA interface taught by the Alles reference with the integrated graphical user interface thermostat system taught by the Shah reference.

One of ordinary skill in the art would have been motivated to modify the PDA interface with the integrated graphical user interface thermostat system to couple a touch-sensitive LCD display with the thermostat's existing central processing unit and RAM.

As per claim 35, the Alles reference discloses the editing mode ("edit-mode") allows the user to select said two or more days ("select the days") using a single screen (see page 15 [0162], "primary display screen 2000") on the display of the user interface ("PDA interface").

As per claim 36, the Alles reference discloses said system includes an HVAC system (see Abstract, "HVAC system").

As per claim 41, the Alles reference discloses the user interface (see page 15 [0161], "PDA display screen") comprises a touch screen ("touch-sensitive") display.

As per claim 42, the Alles reference discloses the user interface (see page 15 [0161], "PDA display screen") comprises a display panel ("display screen") and keypad (see page 18 [0184], "keyboard selection 2143, PDA keyboard 2150").

As per claim 43, the Alles reference discloses the user interface (see page 15 [0161], "PDA display screen") includes a menu-driven interface ("PDA home menu").

As per claim 44, the Alles reference discloses the scheduling routine further includes a schedule review mode (see page 16 [0167], "select-mode") for displaying on the display (see page 15 [0162], "PDA interface") at least some of the current set of schedule parameters (see page 16 [0167], "all days that use the displayed temperature schedule are displayed as selected") stored in the memory unit (see Shah column 3 lines 14 and 30, "memory 300, RAM").

As per claim 45, the Alles reference discloses the schedule review mode (see page 16 [0167], "select-mode") is separate from the editing mode ("edit-mode").

As per claim 46, the Alles reference discloses the schedule (see page 15 [0162], "temperature schedule 2001") includes one or more periods ("eight periods").

As per claim 47, the Alles reference discloses said one or more periods ("periods") include a wake period (see page 15 [0162], "temperature schedule 2001 active 2005"), a leave period ("temperature schedule 2001 empty 2005"), a return

period ("temperature schedule 2001 relaxing 2005"), and a sleep period ("temperature schedule 2001 sleeping 2005").

As per claim 48, the Alles reference discloses further comprising means for canceling (see page 15 [0163], "Del selection 2007") one or more periods ("periods") in the schedule ("temperature schedule display").

As per claim 85, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are non-consecutive days ("select the days") of the week ("entire week").

As per claim 89, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are individually selected using the user interface ("PDA interface").

As per claim 102, the Alles reference discloses while in the editing mode ("edit mode"), a visual indication ("7-Day display 2020") is provided on the display ("display screen") that indicates to the user that more than one day of the week may be selected (see page 16 [0166], "select the days" and [0167], "entire week").

As per claim 103, the Alles reference discloses the scheduling routine further includes a schedule review mode ("select mode") for displaying on the display ("display screen") at least some of the current set of schedule parameters

("temperature schedule") stored in memory unit (see Shah "memory 300, RAM"), wherein in the schedule review mode ("select mode"), the visual indication that indicates to the user that more than one day of the week ("days of the week") may be selected is not provided ("edit mode").

As per claim 49, the Alles reference discloses a programmable controller for use in controlling at least one system of a home, building and/or related grounds, and is adapted to be hardwired to the at least one system of the home, building and/or related grounds, the programmable controller comprising: a user interface (see page 15 [0162], "PDA interface") that includes a display; a memory unit (see page 12 [0136], "flash memory 1504") for storing a set of schedule parameters ("house-specific data, temperature schedules, records of the temperatures and HVAC activity"); and a processor electrically coupled to the user interface and the memory unit, and configured to run a scheduling routine ("program"), said scheduling routine ("program") including an editing mode (see page 16 [0167], "edit-mode") for programming a schedule ("temperature schedules") in the memory unit ("flash memory 1504") using the user interface ("PDA interface"); wherein the editing mode ("edit-mode") allows the user to use the user interface ("PDA

interface") of the programmable controller ("PDA 80") to concurrently select one or more periods (see page 15 [0162], "periods") of the schedule ("temperature schedules") for two or more selected days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week"), and to edit ("edit-mode") the schedule parameters (see page 15 [0162], "specific time 2004, comfort climate 2005, temperature range 2008") for the selected periods ("periods") and days ("select the days").

As per claim 86, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are non-consecutive days ("select the days") of the week ("entire week").

As per claim 90, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are individually selected using the user interface ("PDA interface").

As per claim 91, the Alles reference discloses a method of programming at least part of a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface (see page 15 [0161], "PDA display screen") comprises a display panel ("display screen") and one

or more keys (see Shah column 4 lines 26-29, "physical buttons") that are separate from the display panel ("display screen"), the schedule having at least one schedule parameter, the schedule comprising the steps of: selecting two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week") using one or more of the keys ("physical buttons"); changing the at least one schedule parameter (see page 16 [0172], "editing a temperature schedule") for one or more periods (see page 15 [0162], "periods") during the selected days ("select the days") using one or more of the keys ("physical buttons"); and saving the changes (see page 16 [0172], "SAVE selection 2040") to the at least one schedule parameter ("editing a temperature schedule") for the selected days ("select the days").

The Alles reference does not expressly disclose the controller is equipped with a user interface comprises a display panel and one or more keys that are separate from the display panel.

The Shah reference discloses

(see column 4 lines 26-29, "In addition to the controls programmed and displayed on display unit 200, physical buttons of the thermostat 235 could be

programmed to be used for working with the user interface system as well. This is similar to the operation of a PDA.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the PDA interface taught by the Alles reference with the integrated graphical user interface thermostat system taught by the Shah reference.

One of ordinary skill in the art would have been motivated to modify the PDA interface with the integrated graphical user interface thermostat system to couple a touch-sensitive LCD display with the thermostat's existing central processing unit and RAM.

As per claim 92, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are non-consecutive days ("select the days") of the week ("entire week").

As per claim 93, the Alles reference discloses the selected two or more days ("select the days") of the week ("entire week") are individually selected using one or more of the keys (see Shah "physical buttons").

As per claim 94, the Alles reference discloses a method of programming at least part of a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface (see page 15 [0161], "PDA display screen") having a display ("display screen"), the schedule having at least one schedule parameter, comprising the steps of: displaying a number of day indicators (see page 10 [0167], "7-Day display 2020"), each at fixed locations on the display ("display screen"), and each corresponding to a day of the week (see page 10 [0167], "days of the week"); selecting two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week"); displaying a day selection indicator (see Shah column 4 lines 26-29, "physical buttons") separate from and adjacent to each of the day indicators ("7-Day display 2020") that correspond to the selected days of the week ("days of the week"); changing the at least one schedule parameter (see page 16 [0172], "editing a temperature schedule") for one or more periods (see page 15 [0162], "periods") during the selected days of the week ("days of the week"); and saving the changes (see page 16 [0172], "SAVE selection 2040") to the at least one schedule parameter ("editing a temperature schedule") for the selected days ("select the days").

The Shah reference discloses

(see column 4 lines 26-29, "In addition to the controls programmed and displayed on display unit 200, physical buttons of the thermostat 235 could be programmed to be used for working with the user interface system as well. This is similar to the operation of a PDA.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the PDA interface taught by the Alles reference with the integrated graphical user interface thermostat system taught by the Shah reference.

One of ordinary skill in the art would have been motivated to modify the PDA interface with the integrated graphical user interface thermostat system to couple a touch-sensitive LCD display with the thermostat's existing central processing unit and RAM.

As per claim 95, the Alles reference discloses further comprising the steps of: displaying the at least one schedule parameters (see page 15 [0162], "temperature schedule 2001, specific times 2004") at a fixed location on the display; and during the changing step (see page 16 [0167], "select mode, edit mode"), displaying the changed at least one schedule parameter ("temperature

schedule 2001, specific times 2004") at the corresponding fixed location on the display ("display screen 2000").

As per claim 96, the Alles reference discloses during the changing step ("select mode, edit mode"), displaying the day indicators ("7-Day display 2020"), the day selection indicators (see Shah "physical buttons") and the changed at least one schedule parameter ("temperature schedule 2001, specific times 2004") on the display ("display screen 2000").

As per claim 97, the rejection of claim 94 is incorporated and further claim 97 contains limitations recited in claim 94; therefore claim 97 is rejected under the same rationale as claim 94.

As per claim 104, the Alles reference discloses a method of programming a multiple-day schedule on a controller for a home, building and/or related grounds, wherein the controller is equipped with a user interface (see page 15 [0161], "PDA display screen") having a display ("display screen"), the schedule having at least one schedule parameter, comprising the steps of: initiating an editing mode (see page 16 [0167], "edit-mode") within the controller (see page 5 [0065], "wireless thermometer 70") via the user interface ("PDA interface"); providing a visual

indication ("7-Day display 2020") on the display ("display screen") that indicates to a user of the controller ("wireless thermometer 70") that more than one day of the week may be selected (see page 16 [0166], "select the days" and [0167], "entire week"); selecting two or more days (see page 16 [0166], "select the days") of the week (see page 16 [0167], "entire week"); changing the at least one schedule parameter (see page 16 [0172], "editing a temperature schedule") for one or more periods (see page 15 [0162], "periods") during the selected days ("select the days"); and saving the changes (see page 16 [0172], "SAVE selection 2040") to the at least one schedule parameter ("editing a temperature schedule") for the selected days ("select the days").

As per claim 105, the Alles reference discloses further comprising the step of initiating a schedule review mode ("select mode") within the controller ("wireless thermometer 70") via the user interface ("PDA interface") for displaying current schedule parameters ("temperature schedule"), but not for allowing the user to change one or more of the schedule parameters ("edit mode").

As per claim 106, the Alles reference discloses the providing step provides the visual indication ("7-Day display 2020") on the display ("display screen") that indicates to a user of the controller ("wireless thermometer 70") that more than

one day of the week ("days of the week") may be selected when in the editing mode ("edit mode"), but not when in the schedule review mode ("select mode").

9. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2005/0116055 A1 to Alles in view of USPN 6,595,430 B1 to Shah, and further in view of US Pub. No. 2005/0108091 A1 to Sotak et al.

As per claim 37, neither the Alles nor Shah references expressly disclose said system is a security system.

As per claim 38, neither the Alles nor Shah references expressly said system is a lighting system.

As per claim 39, neither the Alles nor Shah references expressly disclose said system is a sprinkler or drip water system.

As per claim 40, neither the Alles nor Shah references expressly disclose said system is an A/V system.

The Sotak et al. reference discloses
(see page 1 [0002], "Home automation systems have traditionally involved individual systems that provided control over limited aspects of a residential environment. For example, in conventional home automation separate systems may

be provided for lighting control, residential monitoring and/or security, HVAC control, video distribution, audio distribution, telephony, networking and/or smart appliances.")

(see page 1 [0004], "... a lighting system may be programmed to control the state of lights within a residence based on a programmed time, day of the week and/or date. Similar systems are also available to control HVAC operation.")

(see page 4 [0046], "... a family going on vacation may result in changes in the operation of several components of a home automation system, including, for example, adjusting the HVAC system, setting the alarm system, powering down home theater and/or audio systems, changing a lighting schedule or the like.")

(see page 4 [0050], "Examples of controlled devices 22 may include light control modules, appliance control modules, HVAC controllers, audio visual equipment, security systems and/or other home automation components. Examples of input/output devices 24 may include personal computers, laptop computers, pervasive computing devices, such as personal digital assistants, smartphones, or the like, keypads, touchscreen displays or other display devices, including, for example, televisions and/or other devices capable of displaying information to and/or receiving information from a resident of the residence 10.")

(see page 8 [0081], "A Landscape Information System (LIS) module may control the schedule of maintenance and/or irrigation systems.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the intuitive, graphical application running on the PDA taught by both the Alles and Shah references to interface with the home management system taught by the Sotak et al. reference.

One of ordinary skill in the art would have been motivated to further modify the intuitive, graphical application running on the PDA to interface with the home management system to specify various activity schedules, in addition to temperature schedules, to control at least one home management component of the home management system based on the activity schedules of the residents.

Response to Arguments

10. Applicant's arguments, see Remarks pages 17-21, filed 23 November 2005, with respect to the rejections of claims 1, 18, 34 and 49 under 35 USC 102(e) as being anticipated by US Pub. No. 2005/0116055 A1 to Alles have been fully considered and are persuasive. Therefore, the rejections of claims 1-49 have been withdrawn. However, upon further consideration, a new ground(s) of rejection is

made in view of US Pub. No. 2005/0116055 A1 to Alles, USPN 6,851,621 B1 to Wacker et al. and USPN 6,595,430 B1 to Shah.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to programming automation controllers general:

USPN 6,983,889 B2 to Alles

USPN 6,845,918 B2 to Rotondo

USPN 6,718,213 B1 to Enberg

USPN 6,658,303 B2 to Hatemata et al.

USPN 6,144,971 to Sunderman et al.

USPN 5,481,481 to Frey et al.

USPN 4,819,714 to Otsuka et al.

USPN 4,308,991 to Peinetti et al.

US Pub. No. 2005/0116023 A1 to Amundson et al.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 571.272.3679. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571.272.3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CJB

13 January 2006